

DE 30 09 504 A1

Abstract

An arc contact (19) which is arranged fixedly in a housing (11) can be engaged with, and disengaged from, a moving arc contact (31). One of these arc contacts is surrounded by a blasting nozzle (30) whose inlet (29) is connected to a pressure space containing an extinguishing gas. The outlet of the blasting nozzle is connected via a cooling device to an expansion space (112) which is provided in the housing. In order to ensure that the flow resistance opposing the extinguishing gas flowing out of the blasting nozzle is a minimum, with the cooling being equally efficient, and in order to prevent the cooled extinguishing gas striking the inside of the housing directly, the other arc contact (19) is surrounded by a blast tube (16) through which gas flowing out of the blasting nozzle can be blasted axially. At an axial distance from its end facing the blasting nozzle, the blast tube has radial passages (32), which are bounded by deflection rings (33) (which are shaped like guide vanes) and deflect at least a portion of the gas flowing out of the blasting nozzle (30) into an enveloping flow, which flows along the outside of the blast tube (16). The cooling device has cooling surfaces (36) which are essentially parallel to the switch axis (37) and are arranged in an enveloping space (35) between the outside of the blast tube (16) and a screening cylinder (34) which is coaxial thereto and extends at least as far as the passages (32).